

specifying a peel occurring time and a fragility breaking time when charged particles are increased; and

measuring ~~a~~ at least one of peel strength and/or ~~a~~ and the fragility breaking strength.

Claim 2. (Currently Amended) ~~A material strength measuring and evaluating method by detecting charged particles~~ The method according to claim 1, wherein further comprising: ~~forming the test object is formed by~~ to include a substrate and fragile thin film covering the substrate.

Claim 3. (Currently Amended) ~~A material strength measuring and evaluating method by detecting charged particles~~ The method according to claim 1, wherein further comprising: ~~horizontally positioning the test object is positioned horizontally and~~ vertically ~~pressing the indenter is vertically pressed into the~~ a surface of the test object.

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Claim 4. (Currently Amended) ~~A material strength measuring and evaluating method by detecting charged particles~~ The method according to claim 1, wherein the test object is arranged to form a tilt angle with ~~the~~ a pressing direction of the indenter, so that the indenter is pressed in a direction inclined with respect to ~~the~~ a surface of the test object.

Claim 5. (Currently Amended) ~~A material strength measuring and evaluating method by detecting charged particles~~ The method according to claim 1, wherein when charged particles are collected by a charged particle collecting element, an electric potential having a polarity different from that of the charged particles to be collected is applied to the charged particle collecting element.

Claim 6. (Currently Amended) A material strength measuring and evaluating apparatus, ~~which functions by detecting charged particles, said apparatus comprising:~~ a sample mounting base for mounting a test object; an indenter to be pressed into the test object; a charged particle collecting element disposed in the vicinity of the ~~a~~ front end portion of the indenter and formed integrally with or independently from the indenter; an indentation load detector for detecting an indentation load of the indenter; a displacement detector for detecting a displacement amount of the indenter; and a signal processing system for measuring at least one of a peel strength at the time of peel occurrence ~~and/or~~ and a fragility breaking strength at the time of fragility breaking, in accordance with the output signals fed from the indentation load detector, the displacement detector and the charged particle collecting element.

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Claim 7. (Currently Amended) A material strength measuring and evaluating apparatus which functions by detecting charged particles The apparatus according to claim 6, wherein a sample setting surface on the sample mounting base is changeable between a horizontal state and an inclined state.

Claim 8. (Currently Amended) A material strength measuring and evaluating apparatus which functions by detecting charged particles The apparatus according to claim 6, wherein the front end portion of the indenter is formed by a diamond, a sapphire or a piezoelectric material.